(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

CORRECTED VERSION

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 15 January 2004 (15.01.2004)

(10) International Publication Number WO 2004/005770 A3

(51) International Patent Classification7:

F16J 15/34

(21) International Application Number:

PCT/GB2003/002941

(22) International Filing Date: 8 July 2003 (08.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0215750.1 0221729.7

8 July 2002 (08.07.2002) GB 19 September 2002 (19.09.2002) GB

- (71) Applicant (for all designated States except US): AES ENGINEERING LIMITED [GB/GB]; Mill Close, Bradmarsh Business Park, Templeborough, Rotherham, S. Yorks S60 1BZ (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): RODDIS, Alan [GB/GB]; 51 Charlton Brook Crescent, Chapeltown, Sheffield, S Yorks S35 2XR (GB).

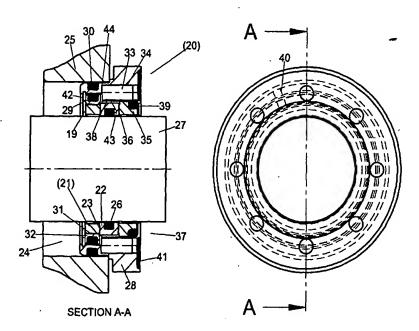
- (74) Agent: HARRISON GODDARD FOOTE; Belgrave Hall, Belgrave Street, Leeds LS2 8DD (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

[Continued on next page]

(54) Title: ROTARY SEAL



(57) Abstract: A mechanical seal has an axially floating seal face (21) in sliding contact with an axially stationary seal face (22). A biasing means (33), such as a magnet, biases the floating seal face towards the stationary seal face. The axially floating seal face and the biasing means are rotationally fixed relative to each other and the axially stationary seal face is free to rotate relative to the axially floating seal face. The seal may be used, for instance, as a bearing protector or isolator.

WO 2004/005770 A3



- (88) Date of publication of the international search report: 29 April 2004
- (48) Date of publication of this corrected version:

21 October 2004

(15) Information about Correction: see PCT Gazette No. 43/2004 of 21 October 2004, Section Π

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.